



## **Constraints Experienced by the Farmers in Mango Production**

**Key words :** Constraints, Framers and Mango Production.

Mango is the leading fruit crop of India and considered to be the king of fruits. Besides delicious taste, excellent flavour and attractive fragrance, it is rich in vitamin A&C. Mango occupies 22 per cent of the total area under fruits comprising of 1.2 million hectares, with a total production of 11 million tonnes. Uttar Pradesh and Andhra Pradesh are having the largest area under mango cultivation each with around 25per cent of the total area followed by Bihar, Karnataka, Kerala and Tamil Nadu. India is the largest mango producing country, accounting about 60 per cent of world production, the export of fresh fruit is limited to Alphonso and Dashehari varieties. India's share in the world mango market is about 15 per cent. Mango accounts for 40 per cent of the total fruit exports from the country. But due to certain constraints mango production is declining in the state. In such situations mango tree become very old, which make it difficult to perform the needful cultural operations like pruning, training, pest and disease control etc. As a result irregular bearing of fruits becomes the rule rather than an exception. Low yield or no yield is also common due to alternate bearing. In this direction the present study was undertaken to know the constraints in mango production by mango growers.

The study was conducted during 2011-2012 in Khammam district of Andhra Pradesh state. Three mandals namely Thallada, Aswaraopet and Kalluru were randomly selected from the district. From the selected mandals Mittapalli and Annarugudem in Thallada mandal, Naravarigudem and Achutapuram in Aswaraopet mandal, Muttaram and Lokavaram villages in Kalluru mandal were selected. A total of six villages were selected based on the cultivable area of Mango. From each village ten mango farmers were selected for the study , comprising 60 respondents were finally selected by random sampling technique. Data was collected through pretested structured interview schedule. Personal interview technique was used for data collection. The data thus collected from the

respondents were processed and tabulated. The frequency of responses for each of the constraints worked out separately and ranked.

The identified constraints as perceived by the Mango growers along with frequency distribution and percentage are given in below. These constraints are grouped into Technical, Socio economic, Biotic and Abiotic and Institutional constraints.

The results revealed that among the technical constraints, irregular bearing 52(86.66%) ranked first followed by un timely management of different operations in orchards 47 (78.30%), fruit and flower drop 36 (60%), un availability of quality grafts 33 (55%) and lack of interest on inter crops in early mango orchards. In Biotic and Abiotic constraints heavy incidence of fruit borers, hoppers, shoot borers 54 (90%), anthrax nose and mangu51(85%) and fixed cold period (lack of continuous temperature less than 15°C for 15 days 42 (70%) ranked first followed by yield loss due to heavy rains followed by dry spells 41 (68.20%) , depletion of ground water resources 35 (58.30 %) and severe micro nutrient deficiency and lack of awareness on usage of micro nutrients 30 (50%) .The growth and yield of mango is affected by the incidence of various pests like hoppers, fruit borers, shoot borers etc., and diseases such as Anthracnose, Mangu etc. If proper care and attention is not taken, the pests and diseases may spread and cause severe damage. Any pest or disease attack may have to be diagnosed and controlled at the initial stages, or else it will be difficult to control.

The Abiotic problems like storms, drought, landslides, floods, severe micronutrient deficiency and lack of awareness on usage etc., are a serious threat to mango cultivation, resulting in heavy loss to the growers. These unexpected blows of nature add oil to the flames of farmer's indebtedness and poverty. Fruit and flower drop is yet another problem in mango cultivation due to poor management

practices. Uniformity in production is necessary for easy cultural operations, harvesting and marketing. Wrong diagnosis of pests and diseases and lack of knowledge about remedial measures. Proper trainings and awareness campaigns are most important.

Among the Socio economic constraints, scarcity of labor and high labor wages at the time of field operations 58 (96%), middle men involvement in marketing 57 (95%) , lack of processing units 46 (76.60%) , high cost of inputs 49 (81.6%) , lack of storage and transport facilities 39 (65%) lack of remunerative price 40 (66.60%) and harvesting of mango are the main problems. It can be seen that there is a tendency among the labourers to shift from agriculture to more profitable non-agricultural jobs. The young generation's attitude towards agricultural work is also not promising. Involvement of more middle men, lack of mango processing units, high cost of pesticides and fertilizers etc., are the other problems. Timely supply of inputs through service agencies will help the farmers to a great extent to solve this drawback. The cost of manures, fertilizers and pesticides are so high that they are not affordable to the farmers. The high labour charges cause an increase in the cost of cultivation affecting the net profit. The price fluctuation of the produce is another crisis and the price of the produce varies according to the season, market and locality. There may be inflations in price even during the earlier and later stages of the same season, which in turn causes loss to the farmers (Sangeetha et al. 2012). Delineation of constraints in adopting the recommended technologies would help the research and extension system to strengthen the efforts and bridge the gap between technology transfer and adoption (Trivedi et al. 2008).

Regarding the institutional constraints lack of market facility 51 (85.0 %), ranked first followed by lack of marketing information, 46 ( 76.60%) lack of scientific approach and contact with extension system 39 (65 %) and lack of awareness on government programmes on mango orchard and subsidies given by government etc 37 (61.60%), Improper credit facilities, high transportation charges and inadequate marketing facilities are the other limiting factors in cultivation of mango (Yadav et al.2010). As the farmers are not able to sell their

produce directly the major share of profit is going to the hands of intermediaries.

#### **Recommendations to overcome constraints:**

Some of the recommendations to overcome the constraints are suggested:

- Most of the farmers are economically backward. Financial assistance needs to be provided to the farmers for taking up cultivation of crops. There is also need to improve or re-organize the existing credit facilities.
- Losses in cultivation should be compensated adequately by strengthening crop insurance programmes.
- Providing timely and accurate information to farmers and improving the existing facilities. Frequent training programmes should be arranged. Public information system should be strengthened by displaying notice boards at Krishi Bhavans as well as different locations of public gatherings.
- Assistance should be given for digging wells and for installing pump sets so that irrigation facilities may be improved.
- Adequate measures should be taken for reducing the problem of labour scarcity and high labour charges. Mechanization should be promoted for reducing labour problems.
- Soil and water conservation measures should be enhanced.
- Timely availability of inputs should be ensured. Farmers' co-operative societies should be established for necessary and timely supply of inputs at subsidized rates.
- Need based research system should be strengthened for releasing improved hybrid varieties and low cost technologies. Pest and disease resistant high yielding short duration varieties should be evolved
- Transportation and marketing facilities should be improved. Enough marketing centers should be established at each locality and the Government should arrange transportation services and sufficient packing, storing and keeping facilities exclusively for agricultural commodities.

- Ensure price stabilization. The fluctuation in price can be controlled by encouraging farmer manned markets/ regulated markets which reduce the interference of middlemen, thereby assuring a reasonable price to producer.
- Promoting value added products by establishing mango processing units will be helpful for employment generation as well for the improvement of the socio-economic status of mango growers.

Incidence of pests and diseases ranked first among production constraints followed by labour scarcity. Non- availability of inputs, weather problems, staggered production, and unawareness of plant protection measures are other limiting factors in mango cultivation. High labour charges, price fluctuation of the produce, inadequate credit facilities, high transportation charges and inadequate marketing facilities are the other socio economic constraints faced by mango growers. Through an organized attempt at the grass root level, by promoting group farming, farmers consortium and decentralized planning process and building market linkages most of the production and economic constraints can be abridged to a great extent, which will make mango cultivation a profitable enterprise.

Organization of awareness campaigns and short duration training courses time to time, demonstrations on different aspects for increasing knowledge of the mango growers, supply of critical inputs at proper time, assistance of financial support through different banking organization, providing post-harvest technology and marketing information to the mango farmers are suggested as suitable strategies for promotion of quality mango production.

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